



SEQUENCE LISTING

<110> The Government of the United States of America as
represented by the Secretary of the Department of Health and
Human Services, Centers for Disease Control and Prevention
Weigel, Linda M.
Tenover, Fred C.

<120> Oligonucleotide Probes for Detecting Enterobacteriaceae and
Quinolone-Resistant Enterbacteriaceae

<130> 6395-68161-01

<140> US 10/798,827
<141> 2004-03-10

<150> US 09/647,563
<151> 2001-01-16

<150> PCT/US99/06963
<151> 1999-03-30

<150> US 60/080,375
<151> 1998-04-01

<160> 35

<170> PatentIn version 3.3

<210> 1
<211> 589
<212> DNA
<213> Escherichia coli

<400> 1
acaccggtca acattgagga agagctgaag agctcctatc tggattatgc gatgtcggtc 60
attgttg gcc gtgcgctgcc agatgtccga gatggcctga agccggtaca ccgtcgcgta 120
ctttacgcca tgaacgtact aggcaatgac tggaacaaag cctataaaaa atctgcccgt 180
gtcgttggtg acgtaatcgg taaataccat ccccatgggtg actcggcggt ttatgacacg 240
atcgctccgta tggcgcagcc attctcgtg cgttacatgc tggtagacgg tcagggtaac 300
ttcggttcca tcgacggcga ctctgcggcg gcaatgcggt atacggaaat ccgtctggcg 360
aaaattgccc atgaactgat ggctgatctc gaaaaagaga cggtcgattt cgttgataac 420
tatgacggta cggaaaaaat tccggacgtc atgccaacca aaattcctaa cctgctgggtg 480
aacggttctt ccggtatcgc cgtaggtatg gcaaccaaca tcccgccgca caacctgacg 540
gaagtcatca acggttgtct ggcgtatatc gatgatgaag acatcagca 589

<210> 2
<211> 589
<212> DNA
<213> Citrobacter freundii

<400> 2
acaccggtca acattgagga agagctgaag agctcctatc tggattatgc gatgtcggtc 60
attgttggcc gtgcgctgcc agacgtccga gatggcctga agccggttca ccgtcgcgta 120
ctttacgcca tgaacgtatt gggcaacgac tggaataaag cctataaaaa atctgcccggt 180
gtcgttgggtg acgtaatcgg taaataccac cctcatgggtg ataccgccgt ttacgacacc 240
attgttcgta tggcgcagcc attctccttg cgttacatgc tggtagatgg tcagggtaac 300
tttggttctg tcgatggcga ctccgcagcg gcgatgcggtt atacggaaat ccgtatgtcg 360
aaaatcggcc atgagctgat ggctgacctg gaaaaagaaa cggttgattt cgtcgataac 420
tacgacggca ccgaacaaat tcctgacgtc atgccgacca aaattcctaa cctgctgggtg 480
aacggttcgt ccggtatcgc ggtaggtatg gcgaccaaca ttccgccgca caacctgact 540
gaagtgatca acggctgtct ggcataatatt gacgatgaag acatcagca 589

<210> 3
<211> 589
<212> DNA
<213> Enterobacter aerogenes

<400> 3
acaccggtca acattgagga agagctgaaa agctcgtatc tggattatgc gatgtcggtc 60
attgttggcc gtgcgctgcc ggatgtccga gatggcctga agccggtaca ccgtcgcgta 120
ctatacggca tgaacgtatt gggcaatgac tggaacaaag cctataaaaa atcagcccggt 180
gtcgttggcg acgtaatcgg taaataccac ccgcatgggtg ataccgccgt ttatgacacc 240
atcgtaagta tggcgcagcc gttctccttg cgttatatgc tggtcgatgg ccagggtaac 300
tttggttctg tcgatggcga ctccgctgca gcgatgcggtt atacggaaat ccgtatgtcg 360
aagatcgctc atgagctgat ggccgatctc gaaaaagaga cggttgattt cgtcgacaac 420
tatgacggca cggagaaaat ccctgacgtc atgccgacca aaatccctaa cctgctgggtg 480
aacggttctt ccggtatcgc cgtaggtatg gcgaccaaca ttccgccgca taacctgacg 540
gaagttatca acggctgcct ggcatacgtt gataacgaag acatcagca 589

<210> 4
<211> 589
<212> DNA
<213> Enterobacter cloacae

<400> 4
acaccggtta acatcgagga agagctgaag agctcctatc tggactatgc gatgtcggtc 60
attgttggcc gtgcgctgcc ggacgtccgc gatggcctga agccggtaca ccgtcgcgta 120

ctatacgcca tgaacgtatt gggcaatgac tggaataaag cctacaaaaa atctgcccgt	180
gtcgttggtg acgtaatcgg taaataccat ccccatggtg attccgcggt gtacgacacc	240
atcgttcgta tggcgcagcc tttctcgtg cgttacatgc tggtagatgg tcagggtaac	300
tttggttcta tcgacggcga ctccgcgcg gcaatgcgtt atacggaaat ccgtctggcg	360
aaaattgccc atgagctgat ggccgacctg gaaaaagaga cggttgattt cggtgataac	420
tacgatggca cggaaaaaat tcttgacgtc atgccaacga agatccctaa cctgctggtg	480
aacggttcgt ccggtatcgc cgtagggatg gcgaccaaca ttccgcgcga caacatcacc	540
gaagtgatca acggctgcct ggcctatatc gacgatgaag acatcagca	589

<210> 5
 <211> 589
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 5	
acaccggtca acattgagga agagctgaag agctcctatc tggattatgc gatgtcggtc	60
attgttggcc gtgcgctgcc ggatgtccga gatggcctga agccggtaca ccgtcgcgta	120
ctatacgcca tgaacgtatt gggcaatgac tggaacaaag cctataaaaa atctgcccgt	180
gtcgtgggtg acgtcatcgg taaataccac cctcatggtg atactgccgt atacgacacc	240
attgtacgta tggcgcagcc attctccctg cgttacatgc tggtagatgg ccagggtaac	300
tttggttcgg tcgacggcga ctccgcgcga gcgatgcgtt atacggaaat ccgtatgtcg	360
aagatcggcc atgaactgat ggccgacctc gaaaaagaga cggtggtattt cgtcgataac	420
tatgacggca cggagaaaaat ccctgacgtt atgccgacca aaatcccgaa cctgctagtc	480
aacggttcgt ccggtatcgc ggtaggtatg gcgactaata ttccgcgcga caacctgacc	540
gaagtgatca acggctgtct ggcctacgtt gaaaacgaag acatcagca	589

<210> 6
 <211> 589
 <212> DNA
 <213> *Klebsiella pneumoniae*

<400> 6	
acaccggtca acattgagga agagcttaag aactcttattc tggattatgc gatgtcggtc	60
attgttggcc gtgcgctgcc ggatgtccga gatggcctga agccggtaca ccgtcgcgta	120
ctttacgcca tgaacgtatt gggcaatgac tggaacaaag cctataaaaa atcagcccgt	180
gtcgttggtg acgtaatcgg taaataccac ccgcacggcg actccgcggt atacgacacc	240
atcgtcgta tggcgcagcc gttctcgtg cgttacatgc tggtaggacg ccagggtaac	300

tttggttcca	tcgacggcga	ctccgccgcg	gcgatgcgtt	ataccgaaat	tcgtctggcg	360
aaaatcgctc	atgagctgat	ggccgatctt	gaaaaagaga	cggtcgattt	cgtcgacaac	420
tatgacggta	cggagcgtat	tccggacgtc	atgccgacca	aaattcctaa	cctgctgggtg	480
aacgggcgct	ccgggatcgc	cgtagggatg	gccaccaaca	taccgccaca	taacctgacg	540
gaagtgatta	acggctgtct	ggcgtatggt	gacgatgaag	acatcagca		589

<210> 7
 <211> 589
 <212> DNA
 <213> *Providencia stuartii*

<400> 7	
acaccggtca	atatcgaaga
agaactcaaa	agttcgtatt
tggattatgc	gatgtccggt
	60
attgtcgggc	gcgcgcttcc
agatgttcga	gatggactga
agccagtaca	ccgcagagta
	120
ctgtttgcga	tgaatgtatt
gggaaatgat	tggaataaac
cctataaaaa	atctgcccg
	180
atagtcgggg	acgttatcgg
taaataccat	ccacatgggtg
atagcgctgt	ttatgagaca
	240
atcgttcgtc	ttgctcagcc
tttttctatg	cgttatatgc
tggtagatgg	tcaggggaac
	300
tttggttcag	ttgacggaga
ttccgcagct	gcaatgcgtt
ataccgaaat	ccgtatggcg
	360
aaaattgccc	atgaaatggt
agcggatctt	gaaaaagaga
ccgttgattt	cgccccaaac
	420
tatgatggta	cagagcaaat
ccctgaagtt	atgcctacga
aaatccctaa	cctattgggt
	480
aatggttcgt	caggtattgc
tgttgggatg	gcaacgaaca
ttcctccaca	caacctaggg
	540
gaagtgatca	gcggttgctt
tgcttatata	gatgatgaag
atattagca	
	589

<210> 8
 <211> 589
 <212> DNA
 <213> *Serratia marcescens*

<400> 8	
acaccggtaa	acatcgaaga
cgagttgaaa	aactcgtatc
tggactatgc	gatgtccggt
	60
attgtcggac	gtgccctgcc
agatgttcgt	gatggactga
agccggttca	ccgccgcgtt
	120
ctgtacgcga	tgagcgtatt
gggtaacgac	tggaataaac
catacaagaa	atcggcccgt
	180
gtcgtcgggg	acgtgatcgg
taaatatcac	ccgcacgggtg
acagcgcggt	ttacgacact
	240
atcgtgcgta	tggtcagcc
gttttcactg	cgctacatgc
tggtggacgg	tcagggtaac
	300
ttcggttccg	tcgacggcga
ctccgcggcg	gcgatgcgtt
ataccgaagt	gcgcatgtcc
	360
aagattgctc	acgaactggt
ggcggatctg	gaaaaagaaa
ccgtcgactt	cgtgcctaac
	420
tatgatggca	ccgagcagat
cccggccgtc	atgccgacca
agatcccgaa	cctgctggtc
	480

aacggctcgt cgggcatcgc cgtgggcatg gctaccaata ttccgccgca caacctggcg 540
 gaagtcgtca acggctgcct ggccatatatc gacgatgaaa acatcagca 589

<210> 9
 <211> 120
 <212> DNA
 <213> *Escherichia coli*

<400> 9
 gcccggtgctg ttggtgacgt aatcggtaaa taccatcccc atggtgactc ggcggtttat 60
 gacacgatcg tccgtatggc gcagccattc tcgctgcgtt acatgctggt agacggtcag 120

<210> 10
 <211> 120
 <212> DNA
 <213> *Citrobacter freundii*

<400> 10
 gcccggtgctg ttggtgacgt aatcggtaaa taccaccctc atggtgatac cgccgtttac 60
 gacaccattg ttcgtatggc gcagccattc tccttgcgtt acatgctggt agatggtcag 120

<210> 11
 <211> 120
 <212> DNA
 <213> *Enterobacter aerogenes*

<400> 11
 gcccggtgctg ttggcgacgt aatcggtaaa taccaccgc atggtgatac cgccgtttat 60
 gacaccatcg tacgtatggc gcagccgttc tccttgcgtt atatgctggt cgatggccag 120

<210> 12
 <211> 120
 <212> DNA
 <213> *Enterobacter cloacae*

<400> 12
 gcccggtgctg ttggtgacgt aatcggtaaa taccatcccc atggtgattc cgcggtgtac 60
 gacaccatcg ttcgtatggc gcagccttcc tcgctgcgtt acatgctggt agatggtcag 120

<210> 13
 <211> 120
 <212> DNA
 <213> *Klebsiella oxytoca*

<400> 13
 gcccggtgctg tgggtgacgt catcggtaaa taccaccctc atggtgatac tgccgtatac 60
 gacaccattg tacgtatggc gcagccattc tccttgcgtt acatgctggt agatggccag 120

<210> 14
 <211> 120
 <212> DNA
 <213> *Klebsiella pneumoniae*

 <400> 14
 gcccggtgctg ttggtgacgt aatcggtaaa taccacccgc acggcgactc cgcggtatac 60
 gagaccatcg tgcgtatggc gcagccgttc tcgctgcgtt acatgctggt ggacggccag 120

 <210> 15
 <211> 120
 <212> DNA
 <213> *Providencia stuartii*

 <400> 15
 gcccgatatag tcggggacgt tatcggtaaa taccatccac atggatgatag cgctgtttat 60
 gagacaatcg ttcgtcttgc tcagcctttt tctatgcgtt atatgctggt agatggtcag 120

 <210> 16
 <211> 120
 <212> DNA
 <213> *Serratia marcescens*

 <400> 16
 gcccggtgctg tcggggacgt gatcggtaaa tatcaccgc acggtgacag cgcggtttac 60
 gagactatcg tgcgtatggc tcagccgttt tctatgcgtt acatgctggt ggacggtcag 120

 <210> 17
 <211> 25
 <212> DNA
 <213> *Escherichia coli*

 <400> 17
 actttacgcc atgaacgtac taggc 25

 <210> 18
 <211> 23
 <212> DNA
 <213> *Citrobacter freundii*

 <400> 18
 tgggcaacga ctggaataaa gcc 23

 <210> 19
 <211> 22
 <212> DNA
 <213> *Enterobacter aerogenes*

 <400> 19
 ttatatgctg gtcgatggcc ag 22

<210> 20
 <211> 21
 <212> DNA
 <213> *Enterobacter cloacae*

 <400> 20
 gccggacgtc cgcgatggcc t 21

 <210> 21
 <211> 30
 <212> DNA
 <213> *Klebsiella oxytoca*

 <400> 21
 gtagatggcc agggtaactt tggttcggtc 30

 <210> 22
 <211> 27
 <212> DNA
 <213> *Klebsiella pneumoniae*

 <400> 22
 gtgcgtatgg cgcagccggt ctcgctg 27

 <210> 23
 <211> 25
 <212> DNA
 <213> *Providencia stuartii*

 <400> 23
 cgtcttgctc agcctttttc tatgc 25

 <210> 24
 <211> 20
 <212> DNA
 <213> *Serratia marcescens*

 <400> 24
 ggaataaacc atacaagaaa 20

 <210> 25
 <211> 25
 <212> DNA
 <213> *Escherichia coli*

 <400> 25
 atggtgactc ggcggtttat gacac 25

 <210> 26
 <211> 25
 <212> DNA
 <213> *Escherichia coli*

 <400> 26

atggtgactc ggcggtctat gacac	25
<210> 27	
<211> 25	
<212> DNA	
<213> Citrobacter freundii	
<400> 27	
atggtgatac cgccgtttac gacac	25
<210> 28	
<211> 25	
<212> DNA	
<213> Enterobacter aerogenes	
<400> 28	
atggtgatac cgccgtttat gacac	25
<210> 29	
<211> 25	
<212> DNA	
<213> Enterobacter cloacae	
<400> 29	
atggtgattc cgcggtgtac gacac	25
<210> 30	
<211> 25	
<212> DNA	
<213> Klebsiella oxytoca	
<400> 30	
atggtgatac tgccgtatac gacac	25
<210> 31	
<211> 25	
<212> DNA	
<213> Klebsiella pneumoniae	
<400> 31	
acggcgactc cgcggtatac gacac	25
<210> 32	
<211> 25	
<212> DNA	
<213> Providencia stuartii	
<400> 32	
atggtgatag cgctgtttat gagac	25
<210> 33	
<211> 25	
<212> DNA	

<213> *Serratia marcescens*

<400> 33

acggtgacag cgcggtttac gacac

25

<210> 34

<211> 18

<212> DNA

<213> *Enterobacter* sp.

<400> 34

cgaccttgcg agagaaat

18

<210> 35

<211> 18

<212> DNA

<213> *Enterobacter* sp.

<400> 35

gttccatcag cccttcaa

18